

CLAIMS

N
P
N
Sus 5
K
NP
NK
28

What is claimed is:

1. An electronic identification tag comprising:
2 a means for permanently storing data in an unalterable
3 fashion, said data being known as unalterable data;
4 a means for permanently storing data in an alterable fashion,
5 said data being known as alterable data;
6 a means for communicating said unalterable data and said
7 alterable data to an electronic identification reader.

1. 2. The identification tag of claim 1 wherein said
2 alterability is subject to permanent disablement.

1. 3. The identification tag of claim 1 further comprising:
2 a means for altering said alterable data.

1. 4. The identification tag of claim 3 further comprising:
2 a means for receiving data to be substituted for said
3 alterable data by said altering means.

1. 5. The identification tag of claim 4 wherein said
2 unalterable storage means is a laser programmable read-only memory
3 (laser PROM).

1. 6. The identification tag of claim 4 wherein said alterable
2 storage means is an electrically-erasable programmable read-only
3 memory (EEPROM).

1. 7. The identification tag of claim 1 further comprising:
2 a means for temporarily storing data, said data being known

28
CLAIM 5

NP
NK

3 as temporary data, said communicating means being capable of
4 communicating said temporary data as well as said unalterable and
5 alterable data to an electronic identification reader.

1 6. 8. The identification tag of claim 5 wherein said temporary
2 storage means is a first-in/first-out (FIFO) memory.

1 7. 9. The identification tag of claim 5 wherein said temporary
2 storage means is a random access memory (RAM).

1 10. An apparatus for altering data in the memory of an
2 electronic identification tag independent of the reader comprising:
3 a means for receiving data from a user to be communicated to
4 said tag;
5 a means for communicating said data to said tag.

1 11. The apparatus of claim 10 wherein said communicating
2 means comprises:
3 a means for generating a reversing magnetic field;
4 a means for modulating said reversing magnetic field in
5 accordance with said user-supplied data.

1 12. The apparatus of claim 11 wherein said magnetic field
2 generating means comprises a coil, a first capacitor connected to
3 one end of said coil, and a second capacitor connected to the other
4 end of said coil, said coil and capacitors having an alternating
5 voltage impressed across the series combination, the frequency of
6 said alternating voltage being the resonant frequency of said
7 series combination.

1 13. The apparatus of claim 10 further comprising an

2 electronic identification tag having a memory wherein the data
3 stored in said memory is alterable.

1 14. The apparatus of claim 13 wherein the electronic
2 identification tag comprises:

3 a means for altering said alterable data.

4 a means for receiving data to be substituted for said
5 alterable data by said altering means.

1 15. A method of storing and altering data in an electronic
2 identification tag comprising the steps:

3 P₁ receiving data to be permanently stored in memory in an
4 unalterable fashion, said data being known as unalterable data;

5 P₁ storing said unalterable data in an unalterable memory;

6 L receiving data to be stored in memory in an alterable fashion,
7 said data being known as alterable data, said alterable data being
8 permanently stored until purposely altered;

9 P₁ storing said alterable data in an alterable memory.

10 16. The method of claim 15 wherein said step of receiving
11 data is comprised of the steps:

12 P₁ receiving data from a user to be communicated to said tag;

13 L transmitting said data to said tag.

14 17. The method of claim 15 further comprising the steps:

15 P₁ receiving data to be temporarily stored in memory, said data
16 being known as temporary data; and

17 P₁ storing said temporary data in temporary memory.

18. The method of claim 17 further comprising the step:

2 P_1 communicating said unalterable data, said alterable data, and
3 said temporary data to an electronic identification reader.

1 $\cancel{T_2}$ ^{12.} An electronic identification system comprising a reader
2 and at least one tag, said tag comprising:

3 P_1 a means for permanently storing data in an unalterable
4 fashion, said data being known as unalterable data;

5 P_1 a means for permanently storing data in an alterable fashion,
6 said data being known as alterable data;

7 P_1 a means for altering said alterable data;

8 L a means for receiving data to be substituted for said
9 alterable data by said altering means;

10 P_1 a means for communicating said unalterable data and said
11 alterable data to an electronic identification reader;

12 P_1 said reader comprising:

13 L a means for receiving data from a user to be substituted for
14 said alterable data stored in said alterable storage means in said
15 tag;

16 P_1 a means for communicating said received data from the user to
17 said tag.

END